

# Examiners' Amendment

10/500,718

Bottke et al.

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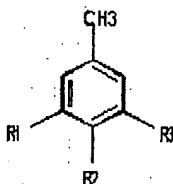
## AMENDMENTS

### Amendments to the Claims

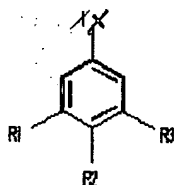
Please amend the claims according to the following listing of the claims.

### Listing of the claims:

1. (currently amended) A process for preparing toluene derivatives of the formula I,



where R<sub>1</sub>, R<sub>2</sub> and R<sub>3</sub> independently of one another are hydroxyl or C<sub>1</sub>-C<sub>6</sub>-alkoxy, by hydrogenating benzaldehydes and/or benzyl alcohols of the formula II,



IIa: X = CHO  
X = CH[OC<sub>1</sub>-C<sub>6</sub>-alkyl]<sub>2</sub>

IIb: X = CH<sub>2</sub>-OH  
X = CH<sub>2</sub>OC<sub>1</sub>-C<sub>6</sub>-alkyl

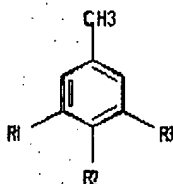
with hydrogen in the presence of a catalyst, wherein the catalyst consists essentially of a catalytically active constituent and optionally a support material, and the catalytically active constituent consists essentially of:

- (a) at least one metal and/or at least one oxide, hydroxide or salt of a metal selected from the group consisting of cobalt, nickel and copper;
- (b) from 0 to 50% by weight of one or more metals and/or one or more oxides, hydroxides or salts of a metal selected from the group consisting of platinum, rhodium, iron, silver, molybdenum, tungsten, manganese, rhenium, zinc, cadmium, lead, aluminum, zirconium, tin, phosphorus, silicon, arsenic, antimony, bismuth, titanium and rare earth metals, and
- (c) from 0 to 5% by weight of an alkali metal oxide or alkaline earth metal oxide, alkali metal hydroxide or alkaline earth metal hydroxide, or alkali metal salt or alkaline earth metal salt,

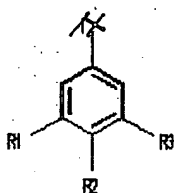
where the sum of the weight percentages of components (a) to (c) is 100% by weight wherein the catalyst is a heterogeneous catalyst.

2. (previously presented) A process as claimed in claim 1, wherein the component (a) makes up from 40 to 99% by weight of the sum of the components (a) to (c).

3. (currently amended) A process for preparing toluene derivatives of the formula I,



where R1, R2 and R3 independently of one another are hydroxyl or C1-C6-alkoxy, by hydrogenating benzaldehydes and/or benzyl alcohols of the formula II,



IIa: X = CHO  
X = CH[OC1-C6-alkyl]2

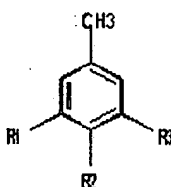
IIb: X = CH2-OH  
X = CH2OC1-C6-alkyl

with hydrogen in the presence of a catalyst, wherein the catalyst consists essentially of a catalytically active constituent and optionally a support material, and the catalytically active constituent consists essentially of:

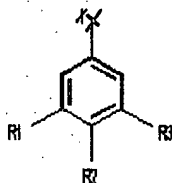
- (a) at least one metal and/or at least one oxide, hydroxide or salt of a metal selected from the group consisting of cobalt, nickel and copper;
- (b) from 0 to 50% by weight of one or more metals and/or one or more oxides, hydroxides or salts of a metal selected from the group consisting of platinum, rhodium, iron, silver, molybdenum, tungsten, manganese, rhenium, zinc, cadmium, lead, aluminum, zirconium, tin, phosphorus, silicon, arsenic, antimony, bismuth, titanium and rare earth metals, and
- (c) from 0 to 5% by weight of an alkali metal oxide or alkaline earth metal oxide, alkali metal hydroxide or alkaline earth metal hydroxide, or alkali metal salt or alkaline earth metal salt,

where the sum of the weight percentages of components (a) to (c) is 100% by weight A process as claimed in claim 1, wherein the component (b) makes up from 1 to 40% by weight of the sum of the components (a) to (c).

4. (currently amended) A process for preparing toluene derivatives of the formula I,



where R1, R2 and R3 independently of one another are hydroxyl or C1-C6-alkoxy, by hydrogenating benzaldehydes and/or benzyl alcohols of the formula II,



IIa: X = CHO  
X = CH[OC1-C6-alkyl]2

IIb: X = CH2-OH  
X = CH2OC1-C6-alkyl

with hydrogen in the presence of a catalyst, wherein the catalyst consists essentially of a catalytically active constituent and optionally a support material, and the catalytically active constituent consists essentially of:

(a) at least one metal and/or at least one oxide, hydroxide or salt of a metal selected from the group consisting of cobalt, nickel and copper;

(b) from 0 to 50% by weight of one or more metals and/or one or more oxides, hydroxides or salts of a metal selected from the group consisting of platinum, rhodium, iron, silver, molybdenum, tungsten, manganese, rhenium, zinc, cadmium, lead, aluminum, zirconium, tin, phosphorus, silicon, arsenic, antimony, bismuth, titanium and rare earth metals, and

(c) from 0 to 5% by weight of an alkali metal oxide or alkaline earth metal oxide, alkali metal hydroxide or alkaline earth metal hydroxide, or alkali metal salt or alkaline earth metal salt,

where the sum of the weight percentages of components (a) to (c) is 100% by weight A process as claimed in claim 1, wherein the component (c) makes up from 0.05 to 5% by weight of the sum of the components (a) to (c).

5. (previously presented) A process as claimed in claim 1 wherein the hydrogenation is carried out in a solvent.

6. (previously presented) A process as claimed in claim 5, wherein the solvent is an ether, an alkylbenzene, water or alcohol or a mixture thereof.

7. (previously presented) A process as claimed in claim 1, wherein the hydrogenation is carried out in the gas phase.

8. (previously presented) A process as claimed in claim 1 wherein the hydrogenation is carried out in the melt of compound II.

9. (previously presented) A process as claimed in claim 1, wherein the hydrogenation is carried out at pressures of from 20 to 250 bar and at temperatures of from 100 to 260°C.

10. (previously presented) A process as claimed in claim 1 for preparing 3,4,5-trimethoxytoluene.

11. (previously presented) The process of claim 1, wherein the catalytically active constituent has the following composition:

(a) at least one metal and/or at least one oxide, hydroxide or salt of a metal selected from the group consisting of cobalt, nickel and copper;

(b) from 0 to 50% by weight of one or more metals and/or one or more oxides, hydroxides or salts of a metal selected from the group consisting of platinum, rhodium, iron, silver, molybdenum, tungsten, manganese, rhenium, zinc, cadmium, lead, aluminum, zirconium, tin, phosphorus, silicon, arsenic, antimony, bismuth, titanium and rare earth metals, and

(c) from 0 to 5% by weight of an alkali metal oxide or alkaline earth metal oxide, alkali metal hydroxide or alkaline earth metal hydroxide, or alkali metal salt or alkaline earth metal salt,

and the sum of the components (a) to (c) is 100% by weight.

~~12. (previously presented) The process of claim 1, wherein the catalyst is a homogeneous catalyst.~~

13. (canceled).

14. (previously presented) The process of claim 1, wherein the catalyst comprises at least one support material selected from the group consisting of aluminum oxide, silicon dioxide, aluminosilicates, lanthanum oxide, titanium dioxide, zirconium dioxide, magnesium oxide, zinc oxide, zeolites and activated carbon.